



Valuing Marine Protected Areas in the Northeast

**A Choice Experiment Approach to
Estimate Non-use Values**

NEFSC & HQ Research Project
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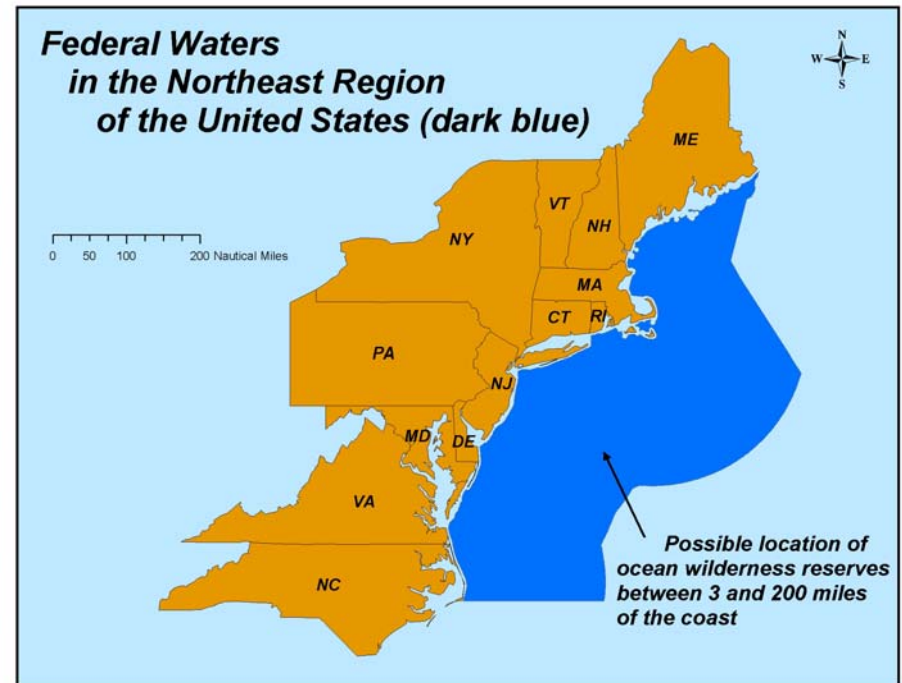


Reason for Study

- Limited evidence that MPAs are economically efficient as a fishery management tool
- Stronger evidence that MPAs are effective to accomplish other management goals
 - Biodiversity preservation
 - Preserving representative habitat types
 - Preserving cultural heritage

Why Non-use Value?

- Location
- Disassociate the MPA from any perceived benefits to fisheries





Choice Experiment

- Decompose a good into relevant attributes
- Construct alternative scenarios that vary in attribute levels
- Ask survey respondents to choose their preferred scenario
- Estimate a model



Challenges



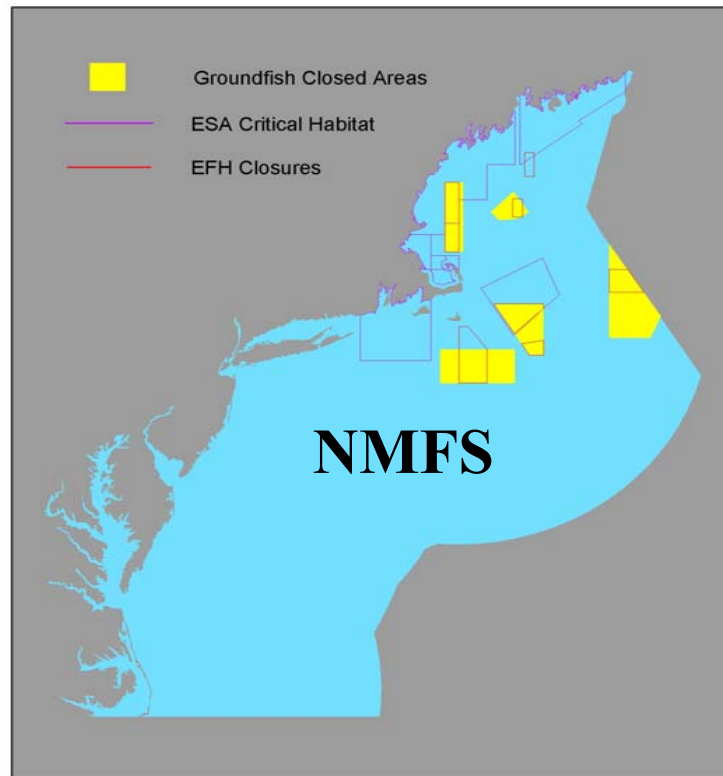
MPAs in the Northeast EEZ

- Planning Development Team: What constitutes an MPA?
- Distinguish between management goals –
de-emphasize fishery benefits
 - *Marine Wilderness Reserve*
- Decomposing an unfamiliar good into relevant attributes
- Payment vehicle
- Opt out

Opt Out

- What does it mean to opt out?
 - The Northeast Region EEZ supports a variety of ocean based industries:
 - » Fishing
 - » Shipping
 - » Waste disposal.
 - Additional interest in developing aquaculture, windmill farms, mining sand and gravel, and oil and gas production.
 - Uses are important to the regional economy
- Should some part of the Northeast Region EEZ be preserved in a natural state as a Marine Wilderness Reserve?

Existing “Managed Areas”



- National Marine Sanctuary
- National Estuarine Research Reserve
- National Park
- National Wildlife Refuge



Decomposition of Good

In a perfect world.....

- The MWR could be composed of the following types of habitats
 - Common habitats such as mud, sand, and gravel
 - Living marine habitat such as deep-water corals
 - Non-living environments such as sea canyons
 - Habitat that provides feeding and breeding grounds for migratory species



Payment

Cost to you

- The cost to you personally each year
 - Decision constraint

Reminders:

- ◆ Benefits are marine wilderness conservation
- ◆ Spillover effects to fisheries are minimal
- ◆ Reserves inaccessible for tourism and recreational purposes
- ◆ Costs to society



Project Status

- Re-presented draft instrument to Planning Development Team in the Northeast
- Preparing for qualitative research
- Knowledge Networks awarded contract to implement survey